ABSTRACT OF THE DISCLOSURE

A method of simplifying the arithmetic operation in a global motion compensation process approximates the motion vector field of the whole image without using many parameters. Motion vectors in the global motion compensation are found by the interpolation and/or extrapolation of the motion vectors of a plurality of representative points 602, 603 and 604 having particular features in the spatial distance thereof. Since the shift operation can be substituted for the division for synthesizing a predicted image of global motion compensation, the processing using a computer or a dedicated hardware is simplified.